

Message

From: Wirick, Holiday [wirick.holiday@epa.gov]
Sent: 7/26/2021 5:52:27 PM
To: Sengco, Mario [Sengco.Mario@epa.gov]; Fleisig, Erica [Fleisig.Erica@epa.gov]
CC: Todd, Andrew [Todd.Andrew@epa.gov]
Subject: Re: Question about ND's chronic criterion for mercury for the protection of aquatic life

Hi Mario, Erica and I just chatted and I'm going to Ex. 5 Deliberative Process (DP) set up a call with you two Ex. 5 Deliberative Process (DP) probably tomorrow or Wednesday.

Thanks,
Holly

From: Sengco, Mario <Sengco.Mario@epa.gov>
Sent: Monday, July 26, 2021 11:34 AM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>; Wirick, Holiday <wirick.holiday@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Sure.

From: Fleisig, Erica <Fleisig.Erica@epa.gov>
Sent: Monday, July 26, 2021 1:16 PM
To: Wirick, Holiday <wirick.holiday@epa.gov>; Sengco, Mario <Sengco.Mario@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Sure! I'm free until 3pm eastern today.

Erica Fleisig
Team Leader, Regional Water Quality Standards Branch
Office of Science and Technology, U.S. EPA
(202) 566-1057

From: Wirick, Holiday <wirick.holiday@epa.gov>
Sent: Monday, July 26, 2021 1:15 PM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>; Sengco, Mario <Sengco.Mario@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: Re: Question about ND's chronic criterion for mercury for the protection of aquatic life

Mario and Erica, do you guys have time to chat about this issue?

Thanks.

From: Fleisig, Erica <Fleisig.Erica@epa.gov>
Sent: Monday, July 26, 2021 10:23 AM
To: Wirick, Holiday <wirick.holiday@epa.gov>; Sengco, Mario <Sengco.Mario@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

ID has .012 ug/L in place (they tried to remove it entirely, and we disapproved the removal). But then FWS concluded jeopardy for white sturgeon in ID (for the .012 ug/L), and this excerpt from the FWS

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The preceding discussion and cited information regarding the effects of the proposed water quality criteria for mercury on the bull trout are also largely applicable to the evaluation of these criteria on the Kootenai River white sturgeon because for some contaminants, the white sturgeon and other sturgeon species are at least as sensitive as the rainbow trout (Dwyer et al. 2005; Ingersoll and Mebane 2014). On that basis, we assumed for this analysis that the white sturgeon is at least as sensitive to mercury as are salmonids.

Erica Fleisig
Team Leader, Regional Water Quality Standards Branch
Office of Science and Technology, U.S. EPA
(202) 566-1057

From: Wirick, Holiday <wirick.holiday@epa.gov>
Sent: Monday, July 26, 2021 12:18 PM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>; Sengco, Mario <Sengco.Mario@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: Re: Question about ND's chronic criterion for mercury for the protection of aquatic life

Thanks Erica. Attached is the T&E species list for ND. Fish: pallid sturgeon and birds: piping plover, red knot whooping crane.

Ex. 5 Deliberative Process (DP)

From: Fleisig, Erica <Fleisig.Erica@epa.gov>
Sent: Monday, July 26, 2021 10:03 AM
To: Sengco, Mario <Sengco.Mario@epa.gov>; Wirick, Holiday <wirick.holiday@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Hi guys,

Ex. 5 Deliberative Process (DP)

Erica Fleisig
Team Leader, Regional Water Quality Standards Branch
Office of Science and Technology, U.S. EPA
(202) 566-1057

From: Sengco, Mario <Sengco.Mario@epa.gov>
Sent: Monday, July 26, 2021 11:46 AM
To: Wirick, Holiday <wirick.holiday@epa.gov>; Fleisig, Erica <Fleisig.Erica@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Ex. 5 Deliberative Process (DP)

Mario

From: Wirick, Holiday <wirick.holiday@epa.gov>
Sent: Monday, July 26, 2021 11:41 AM
To: Sengco, Mario <Sengco.Mario@epa.gov>; Fleisig, Erica <Fleisig.Erica@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: Re: Question about ND's chronic criterion for mercury for the protection of aquatic life

Hi - Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Sengco, Mario <Sengco.Mario@epa.gov>
Sent: Monday, July 26, 2021 7:27 AM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>; Wirick, Holiday <wirick.holiday@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Ex. 5 Deliberative Process (DP)

Mario

From: Fleisig, Erica <Fleisig.Erica@epa.gov>
Sent: Monday, July 26, 2021 9:24 AM
To: Sengco, Mario <Sengco.Mario@epa.gov>; Wirick, Holiday <wirick.holiday@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Ex. 5 Deliberative Process (DP)

Erica Fleisig
Team Leader, Regional Water Quality Standards Branch
Office of Science and Technology, U.S. EPA
(202) 566-1057

From: Sengco, Mario <Sengco.Mario@epa.gov>
Sent: Monday, July 26, 2021 9:23 AM
To: Fleisig, Erica <Fleisig.Erica@epa.gov>; Wirick, Holiday <wirick.holiday@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Ex. 5 Deliberative Process (DP)

Mario

From: Fleisig, Erica <Fleisig.Erica@epa.gov>
Sent: Friday, July 23, 2021 7:50 PM
To: Wirick, Holiday <wirick.holiday@epa.gov>; Sengco, Mario <Sengco.Mario@epa.gov>
Cc: Todd, Andrew <Todd.Andrew@epa.gov>
Subject: RE: Question about ND's chronic criterion for mercury for the protection of aquatic life

Hi Holly,

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP) Thank you!

Erica Fleisig
Team Leader, Regional Water Quality Standards Branch
Office of Science and Technology, U.S. EPA
(202) 566-1057

From: Wirick, Holiday <wirick.holiday@epa.gov>
Sent: Friday, July 23, 2021 3:48 PM
To: Sengco, Mario <Sengco.Mario@epa.gov>
Cc: Fleisig, Erica <Fleisig.Erica@epa.gov>; Todd, Andrew <Todd.Andrew@epa.gov>
Subject: Question about ND's chronic criterion for mercury for the protection of aquatic life

Hi Mario, I hope you had a great weekend.

I'm working on ND's WQS approval letter Ex. 5 Deliberative Process (DP)
The state is revising its chronic aquatic life criterion for mercury from 0.012 ug/L to 0.88 ug/L total recoverable (p. 16 attached). Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP) Pete said he used the mercury conversion translator at: https://www3.epa.gov/npdes/pubs/metals_translator.pdf. The footnote to ND's Water Quality Criteria Table says "Except for the aquatic life values for metals, the values given in this appendix refer to the total (dissolved plus suspended) amount of each substance unless otherwise noted. For the aquatic life values for metals, the values refer to the total recoverable method for ambient metals analyses."

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the 1993 Prothro memo which says (attached p. 28) "... the NPDES rule does not require that State water quality standards be in the total recoverable form; rather, the rule requires permit writers to consider the translation between differing metal forms in the calculation of the permit limit so that a total recoverable limits can be established" which I interpret as either form is fine.

I checked other R8 states' chronic ALC for mercury:

SD 0.77 ug/L
UT 0.012 ug/L
WY 0.77 ug/L*
MT 0.91 **
CO 0.01 ug/L***

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(which I shared with Pete Wax) the Biological Opinion from NMFS on ESA consultation for Idaho's toxics WQS, and NMFS's conclusion, that essentially says EPA's chronic WQC for mercury would not protect aquatic life and may even jeopardize the species, and recommends that Idaho move away from the organic number to a methyl mercury number.

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Ex. 5 Deliberative Process (DP)

Thanks for your help on this issue.

Holly Wirick
Water Quality Section
U.S. EPA - Region 8
(303) 312-6238
(773) 882-1645 (cell)

*WY has similar footnote to ND. "Except for the aquatic life values for metals and where otherwise indicated the values given... refer to the total recoverable (dissolved plus suspended) amount of each substance. For aquatic life values for metals, the values refer to dissolved amount."

**MT's footnote: Standards for metals (except aluminum) in surface water are based upon the analysis of samples following a "total recoverable" digestion procedure (EPA method 200.2, supplement 1, Rev 2.8, May 1994).

*** CO deleted EPA's recommended chronic ALC for mercury of 0.77 ug/L; the current water column standard of 0.01 ug/L total mercury remains in place and is intended to be implemented along side the fish tissue standard [0.3 mg methylmercury per kg fish tissue wet weight].